REMARKS

Claims 46-90 are pending in the application. Claims 46-90 were rejected under 35 U.S.C. §112, second paragraph, as described in paragraph 5 of the Office Action. Claim 64 was rejected, as described in paragraph 6 of the Office Action. Claims 46-48, 50, 52, 62, 74-75, 77-78, 84-86 and 88-89 were rejected under 35 U.S.C. §102(e), as described in paragraph 7 of the Office Action. Claims 63-67, 69-70, 72-73, 80-83 and 90 were rejected under 35 U.S.C. §102(e), as described in paragraph 8 of the Office Action. Claims 53-61, 76, 79 and 87 were rejected under 35 U.S.C. §103(a), as described in paragraph 9 of the Office Action. Claims 49 and 51 were rejected under 35 U.S.C. §103(a), as described in paragraph 10 of the Office Action. Claims 68 and 71 were rejected under 35 U.S.C. §103(a), as described in paragraph 11 of the Office Action. Claims 46, 63, 74, 77, 80, 82, 84 and 90 are the only independent claims.

Claim 64 has been amended as suggested in paragraph 6 of the Office Action. It is therefore respectfully requested that the objection to the claim be withdrawn.

Applicants respectfully traverse the rejection of claims 46-90 under 35 U.S.C. § 112, second paragraph for the following reasons.

As discussed in MPEP § 2173.01, a fundamental principal contained in 35 U.S.C. § 112, second paragraph is that Applicants are their own lexicographers. More particularly, Applicants "can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art."

It is respectfully submitted that the phrase "operable to" is not used in a way that is contrary to its accepted meaning in the art.

Further, as discussed in MPEP § 2173.05(g), there "is nothing inherently wrong with defining some part of an invention in functional terms." More specifically, a "functional limitation must be evaluated and considered just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art at the context in which it is used."

Contrary to that asserted in paragraph 5 of the Office Action, the term "operable" is a requisite degree. More specifically, if a device is not operable to perform that which is recited in the

claimed invention, then such a device would not have the required elements of the invention. Accordingly, it is respectfully submitted that usage of the phrase "operable to" is not vague.

In light of the above discussion, Applicants respectfully request that the rejection of claims 46-90 under 35 U.S.C. § 112, second paragraph be withdrawn.

Applicants respectfully traverse the rejection of claims 46-48, 50, 52, 62, 74-75, 77-78, 84-86 and 88-89 under 35 U.S.C. § 102(e), for the following reasons.

Claim 46 is drawn to a network control system comprising, *inter alia*, a device, a first unit having included therein a controller operable to control said device, said controller comprising a user interface including a display, and a second unit, connected to said first unit through a transmission path, having said device included therein. Claim 46 requires that "when a state of said device is changed, said device transmits updated screen display data to said controller." The controller of claim 46 is further operable to "update the operating screen upon receiving updated screen display data from said device."

It is respectfully submitted that Yoshino et al. (Yoshino) fails to teach the above-identified limitations.

Paragraph 7 of the Office Action asserts that Yoshino discloses "wherein, when a state of said device is changed, said device transmits updated screen display data to said controller." However, the Office Action fails to provide a cited portion of Yoshino to provide evidence that the reference discloses the asserted teachings. After reviewing the reference, it would be apparent to one of ordinary skill in the art, that Yoshino fails to teach that "when a state of said device is changed, said device transmits updated screen display data to said controller." Accordingly, such a statement in the Office Action is not based on evidence in the record and is therefore an unfounded conclusion.

Paragraph 7 of the Office Action further asserts that Yoshino discloses:

"wherein said controller is operable to receive the screen display data and the identification information from said device through the transmission path (col. 4, line 58-67), to receive the updated screen display data when a state of said device is changed, to instruct said display to display the operating screen using the screen display data (figs. 15, 18 and 19), and to update the operating system upon receiving updated screen display data from said device (col. 8, line 63 - col. 9, line 13)."

It is respectfully submitted that the above-identified asserted teaching of Yoshino is not supported by the cited portion of the text. Furthermore, it is respectfully submitted that the above-identified asserted teachings of Yoshino are not supported by any portion of the reference.

Yoshino, as stated at column 4, lines 53-67, transfers a device ID and a device name to other connected devices. After this transfer of information, Yoshino discloses no further transfers of information, let alone of the type as claimed, from a device to a controller. Contrary to the assertions made in the Office Action, Yoshino is silent with regard to a display of a controller when a state of a device is changed.

Referring to column 11, line 49 through column 12, line 43, and more specifically, to column 12, lines 16-27, Yoshino describes a process where a D-VCR is operated to record data received from an IRD. As discussed in this cited portion, Yoshino discloses that when a communication start button 28 is pressed, a "receive data" and "transmit the data to D-VCR" command is sent to the IRD 102, and a "record data (video) sent from the IRD 102" command is sent to the D-VCR 103. There is no mention, in Yoshino, of a transmission of **updated screen display data** from either of the devices, whose states have changed (i.e., D-VCR and IRD), to a controller.

In light of the above discussion, it is clear that Yoshino fails to teach: that when a state of the device is changed, the device transmits updated screen display data to the controller; or that the controller is operable to update the operating screen upon receiving updated screen display data from the device, as required in independent claim 46.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the foregoing, it is clear that Yoshino does not anticipate claim 46.

Furthermore, since claims 47, 48, 50, 52 and 62 are dependent upon claim 46, and therefore include all of the limitations thereof, Applicants submit that claims 47, 48, 50, 52 and 62 are additionally not anticipated by Yoshino.

Claim 74 is drawn to an apparatus operable to be connected via a transmission path to a unit including a controller. The apparatus of claim 74 comprises, *inter alia*, a device operable to be

controlled by the controller via the transmission path. The device of claim 74 is required to be operable, *inter alia*:

"to transmit the screen display data and the identification information to the controller through the transmission path, to transmit updated display data to the controller when a state of said device changes, to receive the identification information of the screen display data and operation information indicative of operation by user, and to operate based on the received identification information and operation information."

With respect to claim 74, similar to claim 46 as discussed above, Yoshino fails to disclose a device operable to transmit updated display data to a controller when a state of the device changes. For at least this reason, in light of *Akzo*, Yoshino fails to anticipate claim 74.

Furthermore, Yoshino fails to teach, or suggest that any of the devices receive from the controller, identification information of the screen display data, and perform an operation based on the received identification information and operation information that is indicative of an operation by a user. For this second reason, in light of Akzo, it is additionally submitted that claim 74 is novel over Yoshino within the meaning of 35 U.S.C. § 102.

Furthermore, as claim 75 is dependent upon claim 74, and therefore includes all of the limitations thereof, Applicants submit that claim 75 is additionally not anticipated by Yoshino.

Claim 77 is drawn to a first unit operable to be connected via a transmission path to a second unit having a device included therein. The first unit of claim 77 comprises, *inter alia*, a controller operable to control the device, said controller comprising a user interface including a display. The controller of claim 77 is required to be operable, *inter alia*:

"receive updated screen display data from the device when the state of the device changes, ... to instruct said display to update the operating screen on said display when updated display data is received, and, in response to an operation by a user to the operating screen, to control the device by transmitting operation information indicative of the operation and the identification information to the device through the transmission path."

Similar to claim 74 as discussed above, Yoshino fails to teach of suggest that the controller is operable to receive updated screen display data from the device when a state of the device changes

and is operable to instruct the display to update the operating screen when updated display data is received, as required in independent claim 77. For at least these reasons, in light of Akzo, it is respectfully submitted that claim 77 is novel over Yoshino within the meaning of 35 U.S.C. § 102.

Furthermore, Yoshino additionally fails to teach that in response to an operation by a user to the operating screen, that the controller is operable to control the device by transmitting operation information indicative of the operation and the identification information to the device through the transmission path, as required in claim 77. In particular, Yoshino fails to disclose a controller transferring to a device, identification information which identifies screen display data. For this additional reason, it is respectfully submitted that claim 77 is not anticipated by Yoshino within the meaning of 35 U.S.C. § 102.

As claim 78 is dependent upon claim 77, and therefore includes all of the limitations thereof, it is additionally respectfully submitted that claim 78 is additionally not anticipated by Yoshino within the meaning of 35 U.S.C. § 102.

Claim 84 is drawn to a method of controlling a device in a network control system in which a first unit and a second unit are connected to each other through a transmission path, at least one of the first unit and the second unit are operable to handle at least one of video data, audio data, and information data, and in which a controller, included in the first unit, controls a device included in the second unit through the transmission path. The control method of claim 84 comprises, *inter alia*:

"transmitting, when a state of the device changes, updated screen display data for updating an operation screen of the device from the device through the transmission path to the controller; ... and updating the operating screen on the controller when the controller receives the updated screen display data."

As discussed above, with respect to claim 84, Yoshino fails to teach transmission of updated screen display data from a device, whose state has changed, to a controller.

Accordingly, it is respectfully submitted that Yoshino fails to teach, or suggest: transmitting, when a state of the device changes, updated screen display data for updating an operation screen of the device from the device through the transmission path to the controller, or updating the operating screen on the controller when the controller receives the updated screen display data, as required in

independent claim 84. For this reason, in light of Akzo, it is respectfully submitted that claim 84 is not anticipated by Yoshino.

Furthermore, as claims 85, 86, 88 and 89 are dependent upon claim 84, and therefore includes all of the limitations thereof, it is additionally respectfully submitted that claims 85, 86, 88 and 89 are additionally not anticipated by Yoshino within the meaning of 35 U.S.C. § 102.

Applicants respectfully traverse the rejection of claims 63-67, 69-70, 72, 73, 80-83 and 90 under 35 U.S.C. § 102(e) for the following reasons.

Claim 63 is drawn to a network control system comprising, *inter alia*, a device, a first unit, having included therein, a controller for controlling said device, second controller comprising a user interface including a display, and a second unit, connected to said first unit through a transmission path, having said device included therein. Claim 63 required that "when a state of said device is changed, said device transmits to said controller through the transmission path, updated partial screen display data corresponding to partial screen display data in which the change of state of said device is to be reflected." Further, the controller of claim 63 is required to be operable to, *inter alia*: "receive the updated partial screen data and update the partial screen display data, in which the change of state of said device is to be reflected, with the updated partial screen display data."

It is respectfully submitted that Takahashi et al. (Takahashi) fails to teach the above-identified limitations.

Page 5 of the Office Action asserts that Takahashi teaches that "when a state of said device has changed, said device transmits to said controller through the transmission path, updated partial screen display data corresponding to the partial screen display data in which the change of state of said device is to be reflected (col. 6, lines 41-45)." It is respectfully submitted that this assertion is incorrect. In particular, the cited portion of the reference fails to discuss updated partial screen display data. Furthermore, no portion of the reference discusses the device transmitting to the controller, updated partial screen display data corresponding to the partial screen display data in which a change of state of the device is to be reflected.

The cited portion of Takahashi generally discloses that the multimedia device 2 can directly communicate with the multimedia controller 1 by passing "various kinds of information." The cited portion further generally indicates that the multimedia controller 1 controls each of the multimedia devices 2 by "by-directionally communicating messages therebetween." However, the specific procedure for communicating between the multimedia devices and the multimedia controller is described further in the reference, for example at column 13, lines 36-64, which describes a procedure performed when a multimedia device is first connected to the network. The reference discloses that when a digital VTR is first connected to the LAN, a delegate object description file is sent from the digital VTR to a system director object. Subsequently, users can use the digital VTR via the digital VTR delegate object by manipulating the multimedia controller.

Takahashi, however, is completely silent as to a device sending updated partial screen display data to a controller when a state of said device is changed. In Takahashi, a delegate object description file is sent once, and only once, at the time a new device is connected to the LAN. Thereafter, even when a state of a device is changed, no further delegate object containing new screen display data, which reflects the device's change in state, is sent to the multimedia controller.

Similar to Yoshino as discussed above, Takahashi fails to teach or suggest updating partial screen display data to a controller when a state of the device is changed. Accordingly, Takahashi fails to teach or suggest: when a state of said device is changed, said device transmits to said controller through the transmission path, updated partial screen display data corresponding to partial screen display data in which the change of state of said device is to be reflected and receive the updated partial screen data and update the partial screen display data, in which the change of state of said device is to be reflected, with the updated partial screen display data, as required in independent claim 63.

In light of Akzo, it is respectfully submitted that claim 63 is therefore not anticipated by Takahashi within the meaning of 35 U.S.C. § 102.

Furthermore, as claims 64-67, 69, 70, 72 and 73 are dependent upon claim 63, and therefore include all of the limitations thereof, Applicants respectfully submit that claims 64-67, 69, 70, 72 and 73 are additionally not anticipated by Takahashi within the meaning of 35 U.S.C. § 102.

Independent claim 80 is drawn to an apparatus operable to be connected via a transmission path to a unit including a controller. The apparatus of claim 80 comprises, *inter alia*, a device operable to be controlled by the controller via the transmission path. The device of claim 80 is required to be operable to, *inter alia*: "transmit to the controller **updated partial screen display data corresponding to partial screen display data** in which a change of state of said device is to be reflected."

Claim 82 is drawn to a first unit operable to be connected via a transmission path to a second unit having a device. The first unit of claim 82 comprises, *inter alia*, a controller operable to control the device, said controller comprising a user interface including a display. The controller of claim 82 is required to be operable to, *inter alia*: "receive updated partial screen display data corresponding to partial screen display data in which a change of state of the devices to be reflected and to update the operating screen on said display using the updated partial screen display data."

Claim 90 is drawn to a method of controlling a device in a network control system in which a first unit and a second unit are connected to each other through a transmission path, at least one of the first unit and the second unit are operable to handle at least one of video data, audio data, and information data, and in which a controller, included in the first unit, controls a device included in the second unit through the transmission path. The control method of claim 90 comprises, *inter alia:* "when a state of the device is changed, transmitting updated partial screen display data corresponding to the partial screen display data in which the change of state of the device is to be reflected; and updating the operating screen on the controller using the updated partial screen display data."

For reasons similar to those discussed above with respect to claim 63, it is respectfully submitted that Takahashi fails to teach or suggest: a device operable to transmit to the controller updated partial screen display data corresponding to partial screen display data in which a change of state of said device is to be reflected, as required in independent claim 80; a controller operable to receive updated partial screen display data corresponding to partial screen display data in which a change of state of the devices to be reflected and to update the operating screen on the display

using the updated partial screen display data, as required in independent claim 82; or a method including when a state of the device is changed, transmitting updated partial screen display data corresponding to the partial screen display data in which the change of state of the device is to be reflected; and updating the operating screen on the controller using the updated partial screen display data, as required in independent claim 90.

In light of Akzo, it is clear that Takahashi does not anticipate claims 80, 82 and 90.

Furthermore, since claims 64-73, 81, and 83 are dependent upon claim 63, 80 and 82, respectively, and therefore include all the limitations thereof, Applicants submit that claims 64-73, 81, and 83 additionally are not anticipated by Takahashi.

It is additionally respectfully submitted that Takahashi and Tsutsumitake fail to teach the shortcomings of Yoshino such that a combination of the teachings of Yoshino, Takahashi and Tsutsumitake would teach that which is required in independent claims 46, 74, 77 and 84.

As discussed in paragraph 9 of the Office Action, Takahashi is relied upon for allegedly teaching "overlap display data at figure 21 and column 14, lines 18-27," "cursor information that includes position information (column 13, lines 12-13)," "the cursor information includes shape, size, color, and enable information (fig. 22; column 16, lines 1-38)."

As discussed in paragraphs 10 and 11 of the Office Action, Tsutsumitake is relied upon for allegedly teaching "identifier information and determining whether or not the stored information is an updated version (column 2, lines 33-38)," and "identifier information and determining whether or not the stored information is an updated version (column 2, lines 33-38)."

While not admitting the accuracy of the asserted teachings of Takahashi (discussed in paragraph 10) or Tsutsumitake (discussed in paragraphs 10 and 11), it is nevertheless respectfully submitted that neither one of Yoshino, Takahashi or Tsutsumitake teaches: when a state of a device is changed, the device transmits updated screen display data to a controller or to update the operating screen upon a receiving updated screen display data from the device, as required in independent claim 46; that a device transmits screen display data and identification information to a controller through the transmission path transmits updated display data to the controller when a state of the device changes, receives the identification information of the screen display data and operation

information indicative of operation by user and operates based on the received identification information and operation information, as required in independent claim 74; a controller that receives updated screen display data from a device when the state of the device changes, instructs display to update the operating screen on the display when updated display data is received and in response to an operation by a user to the operating screen, controls the device by transmitting operation information indicative of the operation and the identification information to the device through the transmission path, as required in independent claim 77; or transmitting, when a state of a device changes, updated screen display data for updating an operation screen of the device from the device through the transmission path to a controller and updating the operating screen on the controller when the controller receives the updated screen display data, as required in independent claim 84.

Further, while not admitting the accuracy of the asserted teachings of Takahashi (discussed in paragraph 10) or Tsutsumitake (discussed in paragraphs 10 and 11), it is nevertheless respectfully submitted that neither one of Yoshino, Takahashi or Tsutsumitake teaches: that when a state of a device is changed, the device transmits to a controller through the transmission path, updated partial screen display data corresponding to partial screen display data in which the change of state of the device is to be reflected or that the controller is operable to receive the updated partial screen data and update the partial screen display data, in which the change of state of the device is to be reflected, with the updated partial screen display data, as required in independent claim 63; that a device is operable to transmit to a controller updated partial screen display data corresponding to partial screen display data in which a change of state of the device is to be reflected, as required in independent claim 80; that a controller is operable to receive updated partial screen display data corresponding to partial screen display data in which a change of state of a device is to be reflected and to update the operating screen on the display using the updated partial screen display data, as required in independent claim 82; or when a state of the device is changed, transmitting updated partial screen display data corresponding to the partial screen display data in which the change of state of a device is to be reflected or updating the operating screen on a controller using the updated partial screen display data, as required in independent claim 90.

In light of the above discussion, it is respectfully submitted that a combination of Yoshino, Takahashi and Tsutsumitake fails to teach or suggest: when a state of a device is changed, the device transmits updated screen display data to a controller or to update the operating screen upon receiving updated screen display data from the device, as required in independent claim 46; that a device transmits screen display data and identification information to a controller through the transmission path, transmits updated display data to the controller when a state of the device changes, receives the identification information of the screen display data and operation information indicative of operation by user and operates based on the received identification information and operation information, as required in independent claim 74; a controller that receives updated screen display data from a device when the state of the device changes, instructs a display to update the operating screen on the display when updated display data is received and in response to an operation by a user to the operating screen, controls the device by transmitting operation information indicative of the operation and the identification information to the device through the transmission path, as required in independent claim 77; transmitting, when a state of a device changes, updated screen display data for updating an operation screen of the device from the device through the transmission path to a controller and updating the operating screen on the controller when the controller receives the updated screen display data, as required in independent claim 84; that when a state of a device is changed, the device transmits to a controller through the transmission path, updated partial screen display data corresponding to partial screen display data in which the change of state of the device is to be reflected or that the controller is operable to receive the updated partial screen data and update the partial screen display data, in which the change of state of the device is to be reflected. with the updated partial screen display data, as required in independent claim 63; that a device is operable to transmit to a controller updated partial screen display data corresponding to partial screen display data in which a change of state of the device is to be reflected, as required in independent claim 80; that a device is operable to receive updated partial screen display data corresponding to partial screen display data in which a change of state of a device is to be reflected and to update the operating screen on the display using the updated partial screen display data, as required in independent claim 82; or when a state of the device is changed, transmitting updated

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partial screen display data corresponding to the partial screen display data in which the change of state of a device is to be reflected or updating the operating screen on a controller using the updated partial screen display data, as required in independent claim 90.

In light of the above discussion, it is respectfully submitted that claims 46-90 are patentable over the prior art of record, within the meaning of 35 U.S.C. § 103.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

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